

AMENDMENT TO THE CLAIMS

1. (Original) A track tensioning device for an endless track on a vehicle, said track tensioning device comprising a roller to engage an interior surface of a track, a spring assembly for urging the roller to provide tension in the track comprising first and second springs mounted to be loaded in series, the springs being of substantially different spring rates, a first of the springs having a lower spring rate than a second of the springs, a mechanical stop to prevent loading the first spring more than a selected amount, and thereafter the second spring providing load resisting movement of the roller caused by tension in the track.
2. (Original) The track tensioning device of claim 1, wherein the springs are compression springs and said mechanical stop comprises a sleeve on an interior of the first spring, and an end slide plate engaging an end of the second spring, said sleeve having an end surface that bears against the slide plate when the first spring is compressed a selected amount.
3. (Original) The track tensioning device of claim 1, wherein the first and second springs are compression coil springs, and wherein said second spring is mounted in a spring assembly including an end slide plate on an end of the second spring spaced away from the roller, a rod mounted in an interior of the first spring and extending slidably through the slide plate, the mechanical stop comprising a sleeve surrounding said rod and positioned on the interior of the first spring, an adjustment nut on the rod bearing against an end of said first spring opposite from the second spring, and said rod being anchored relative to a track frame to provide a reaction force when the springs are compressed.

4. (Original) The track tensioning device of claim 3, wherein said second spring is captured in an assembly including a slide guide and a base plate, said base plate being secured relative to the slide guide, a slide plate at an opposite end of said second spring from said base plate, a pair of guide rods fixed to the base plate and slidably mounted through said slide plate, whereby said slide plate can slide along the guide rods when the second spring compresses, and retainers on said guide rods to pre-load the second spring and hold the slide plate in a position with the second spring under a selected compression.

5. (Original) The track tensioning device of claim 2, wherein said first spring is mounted to have a first end engaging the slide plate and to extend in a direction away from the roller to a second end, a reaction member engaging the second end of the said first spring and being restrained relative to a track frame to stop the first spring from movement in a direction away from said second spring, and the mechanical stop being carried by the reaction member and being of a selected length to engage the slide plate after the first spring has compressed a selected amount.

6. (Original) The track tensioning device of claim 5, wherein said reaction member comprises a threaded shaft and a nut, said threaded shaft passing through the stop member and the first spring and slidably mounted relative to the slide plate of the second spring, and a bracket for holding the threaded shaft from axially movement relative to a track frame in a direction away from the second spring.

7. (Currently Amended) A pretensioned spring track tensioning assembly comprising a tensioner arm for mounting a rotating tension roller for engaging a vehicle drive track, said arm having a slide attached thereto and extending in a direction away from the mounting

for the roller, the slide mounting first and second springs end to end and of different spring rates, the second spring having a first end that is anchored relative to the arm to prevent the second spring from moving toward the mounting for the roller, and the first spring being mounted, adjacent an end of said second spring opposite from the first end of the second spring, a slidable slide plate between the adjacent ends of the first and second springs, a spring retainer slidably mounted relative to said slidable slide plate and secured relative to the arm when the second spring is in place, a guide slidably mounting said slide plate and having retainers thereon to provide for compressing the second spring and retaining the second spring after compression to a desired position, a reaction member engaging an end of the first spring opposite from the second spring and being adapted to be secured from axial movement relative to a track frame to react loads on the tensioner arm tending to compress the first and second springs, and a stop member to limit the amount of compression of the first spring when the tensioner arm is loaded in a direction to provide a force against the reaction member.

8. (Currently Amended) The pretensioned spring assembly of claim 7, wherein said reaction member comprises a shaft, said shaft being mounted in the center of said first spring and slidably extending through said slide plate, and wherein said stop member is carried with said shaft, such that when the first spring has compressed a selected amount the stop member engages the slide plate and further movement of the tensioning-tensioner arm toward the reaction member loads the second spring through the slide plate and stop member.

9. (Original) The pretensioned spring assembly of claim 8, wherein the reaction member further comprises a nut threadably movable on the shaft, the nut having a flange to engage the first spring.

10. (Original) The pretensioned spring assembly of claim 9, wherein the shaft is rotatably secured to the track frame.

11. (Original) The pretensioned spring assembly of claim 9, wherein the reaction member includes a reaction plate mounted to carry compression loads from the springs to the track frame, the shaft being rotatable relative to the reaction plate.

12. (Original) The pretensioned spring assembly of claim 11 and a lock plate to selectively lock the shaft from rotation relative to the reaction plate.